

Syllabus of the competitive examination to be conducted through the Commission for appointment to the post of Specialist Medical Officers (Microbiology) under Bihar Health Services.

Name of Post	- Specialist Medical Officer (Microbiology)
Type of Examination	- Objective Type (Computer Based Test)
Time Duration	- 02:00 Hours
Number of Questions	- 100
Total Marks	- 400 Marks
Marks for Each Right Answer	- 04 Marks
Negative Marks for Each Wrong Answer	- 01 Mark

Question will be asked under following syllabus :

1. General Microbiology
 - a. Sterilization, disinfection and lyophilization.
 - b. Morphology of bacteria and other Microorganisms
 - c. Bacterial toxins
 - d. Bacteriocins
 - e. Microbiology of hospital environment
 - f. Microbiology of air, milk and water
 - g. Bacterial genetics and bacteriophages
 - h. Mycobacteria
 - i. Spirochaetes
 - j. Chlamydia
2. Mycology
 - a. Yeasts and yeast like fungi of medical importance
 - b. Mycelial fungi of medical importance
 - c. Dimorphic fungi
3. Virology
 - a. DNA viruses of medical importance

- b. RNA viruses of medical importance
 - c. Slow viruses including prions
 - d. Hepatitis viruses
 - e. Virioids prions
 - f. Vaccines and anti-viral drugs.
4. Parasitology
- a. Protozoan parasites of medical importance
 - b. Helminthology of medical importance
 - c. Entomology: common arthropods and other vectors viz, mosquito, sand fly, ticks mite, cyclops, louse, myiasis
 - d. Anti-parasitic agents.
5. Applied Microbiology
- a. Antimicrobial prophylaxis and therapy
 - b. Hospital acquired infections
 - c. Investigation of an infectious outbreak in hospital and community
 - d. Opportunistic infections
6. Immunology
- a. Antigens
 - b. Immunoglobulins
 - c. Complement
 - d. Antigen and antibody reactions
 - e. Hypersensitivity
 - f. Cell mediated immunity
 - g. Cytokines
 - h. Immunodeficiency
 - i. Auto-immunity
 - j. MHC complex
 - k. Transplantation immunity
 - l. Vaccines and immunotherapy

7. Systematic bacteriology
 - a. Gram positive cocci of medical importance
 - b. Gram negative cocci of medical importance
 - c. Gram positive bacilli of medical importance
 - d. Gram negative bacilli of medical importance
